

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.(currently amended) A reduced-wear sealing element (~~10, 30, 40, 50, 60~~), characterised in that it is made at least in part from a self-lubricating plastics material comprising a wear- resistant polymer matrix (~~11~~), in which are dispersed microcapsules (~~12~~) containing a lubricating agent.

2.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 1, characterised in that said polymer matrix (~~11~~) comprises a polyketone.

3.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 2, characterised in that said polyketone is an aromatic polyketone.

4.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 3, characterised in that said aromatic polyketone is polyetherether ketone (PEEK).

5.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 1, characterised in that said polymer matrix (~~11~~) comprises a resin selected from among polybutadiene- styrene (PBS), polytetrafluoroethylene (PTFE) and blends thereof.

6.(currently amended) A sealing element (~~10,30,40,50,60~~) according to ~~any one~~ of the preceding claims ~~1-5~~claim 1, characterised in that said microcapsules (~~12~~) comprise a shell of polyoxymethylene urea (PMU).

7.(currently amended) A sealing element (~~10,30,40,50,60~~) according to ~~any one~~ of the preceding claims ~~1-6~~claim 1, characterised in that said microcapsules (~~12~~) have an average diameter of between 5 and 500 μ .

8.(currently amended) A sealing element (~~10,30,40,50,60~~) according to ~~any one~~ of the preceding claims ~~1-7~~claim 1, characterised in that said microcapsules (~~12~~) are dispersed in said polymer matrix (~~11~~) in a ratio by weight of between 2 and 30 wt. %.

9.(currently amended) A sealing element (~~10,30,40,50,60~~) according to ~~any one~~ of the preceding claims ~~1-8~~claim 1, characterised in that said lubricant incorporated in the microcapsules (~~12~~) is an oil which is low in acidity.

10.(currently amended) A sealing element (~~10,30,40,50,60~~) according to ~~any one of the preceding claims 1-9~~claim 1, characterised in that said lubricant is a fluid lubricant which has a viscosity within the range between 20 and 250 cSt.

11.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to ~~any one of the preceding claims 1-10~~claim 1, characterised in that said lubricant further comprises an additive or filler to increase mechanical strength or thermal conductivity.

12.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 11, characterised in that said additive is a microelement selected from the group consisting of zinc, boron and mixtures thereof.

13.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to ~~any one of the preceding claims 1-12~~claim 1, characterised in that it is a sealing ring (~~30, 40~~) for a piston (~~21~~) or cylinder of a reciprocating compressor.

14.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to ~~any one of claims 1-12~~claim 1, characterised in that it is a guide ring (~~50~~) for a piston (~~21~~) or cylinder of a reciprocating compressor.

15.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to ~~any one of claims 1-12~~claim 1, characterised in that it is a packing ring (~~60~~) for a shaft (~~22~~) of a piston (~~21~~) of a reciprocating compressor.

16.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 13, characterised in that said sealing ring (~~30, 40~~) is accommodated in a circumferential seat (~~26~~) provided in the side of a piston (~~21~~) of a reciprocating compressor.

17.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 14, characterised in that said guide ring (~~50~~) has grooves (~~52~~) and is accommodated in a circumferential seat (~~26~~) provided in the side of a piston (~~21~~) of a reciprocating compressor.

18.(currently amended) A sealing element (~~10, 30, 40, 50, 60~~) according to claim 16, characterised in that said sealing ring (~~30, 40~~) has at least one through cut (~~32, 42~~), inclined relative to the axis of the ring (~~30, 40~~).